

April 05, 2002

ABSTRACT OF THE DISCLOSURE**Vibratory Transducer**

- To conduct a fluid, the transducer has a flow tube which in use is vibrated by an excitation system and whose inlet-side and outlet-side vibrations are
- 5 detected by means of a sensor system. In response to transverse forces produced in the vibrating flow tube, the latter is, at least temporarily, laterally displaced from an assigned static rest position. To improve the dynamic balance of the transducer, a first cantilever and a second cantilever are rigidly fixed to an inlet-side tube section and an outlet-side tube section, respectively.
- 10 By means of the cantilevers, the inlet-side and outlet-side tube sections are deformed as a result of lateral displacements of the flow tube. This produces counterforces which at least partially counterbalance the transverse forces produced in the vibrating flow tube. One advantage of the proposed transducer is that it is well balanced even during variations in fluid density.